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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,260

04/01/2004

Barry W. Townsend

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ARLINGTON, VA 22209-3873

EXAMINER

BLANCO, JAVIER G

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

06/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/814,260	<b>Applicant(s)</b> TOWNSEND ET AL.	
	<b>Examiner</b> JAVIER G. BLANCO	<b>Art Unit</b> 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 and 47-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 30-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :8/12/2004; 4/11/2005; 10/12/2005; 5/16/2006; 8/22/2006; 3/28/2007; 3/7/2008.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicants' election of **Prosthetic Foot**: Species E (embodied in Figure 41), **Foot Keel**: Species B (embodied in Figures 6 and 7), **Calf Shank**: Species A (embodied in Figure 15), **Coupling Element**: Species B (embodied in Figure 26), and **Method of generating kinetic power**: Species B (embodied in claims 40-49) in the reply filed on May 9, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 20-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 9, 2007.

### *Specification*

3. The disclosure is objected to because of the following informalities: please update the CROSS-REFERENCE TO RELATED APPLICATION section. Appropriate correction is required.

### *Double Patenting*

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**5.** Claims 1-49 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over:

- (i)** Claims 1-82 of copending Application No. 10/473,682;
- (ii)** Claims 1-30 of copending Application No. 10/594,796;
- (iii)** Claims 1-22 of copending Application No. 11/234,159; and
- (iv)** Claims 1-21 of copending Application No. 11/643,676.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the above-indicated applications claim a prosthetic foot comprising a resilient calf shank, a device (e.g., strap) for assisting posterior movement, and/or a spring. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

**6.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-9, 12-19, 30, 31, and 40-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **E.C. Carter** (US 2,453,969; cited in Applicants' IDS).

Referring to Figures 1-6, Carter discloses a prosthetic foot comprising:

(i) A foot keel (Figure 1: plate 22; Figure 4: member 42) having forefoot, midfoot, and hindfoot portions;

(ii) A resilient calf shank having a lower end (Figure 1: lower end 18; Figure 4: lower end 45) connected to the foot keel and extending upwardly therefrom to a middle portion of the shank by way of an anterior facing convexly curved surface (Figure 1: front surface of coil 6; Figure 4: front surface of spring 40) extending upwardly in a substantially curvilinear manner above the ankle joint area *to form* a lower, prosthetic part of a leg, the shank having an upper end (Figure 1, first interpretation: end 9 by itself; Figure 1, second interpretation: coil 5 + strut 9; Figure 1, third interpretation: coil 5 + strut 9 + cylinders 13; Figure 1, fourth interpretation: coil 5 + strut 9 + portion 1; Figure 4, first interpretation: upper end 39; Figure 4, second interpretation: upper end 39 + cylinders 33; Figure 4, third interpretation: upper end 39 + portion 31) *for connection* with a supporting structure on a person's leg stump; and

(iii) A device including a strap (Figure 1: flexible strap 26; Figure 4: flexible strap 53) extending between and connected (directly or indirectly) to the upper and lower ends of the shank to dampen the motion and limit the extent of the motion (controls anterior movement, and assists posterior movement) of the upper end of the shank (see column 3, lines 5-14), and a spring (Figure 1: spring 12; Figure 4: spring 55) which is resiliently biased by the at least one strap in

response to anterior movement of the upper end of the calf shank. The means for adjustably tensioning the at least one strap is 51 (see Figure 4).

The foot and shank comprise a plurality of concavities (e.g., inner, opposite surfaces of the convexly curved surfaces). An adjustable fastening arrangement (Figure 1: coupling elements 20, 21, 25 + longitudinally-spaced fasteners 24; Figure 4: coupling elements 48, 51 + longitudinally-spaced fasteners 50) connects the lower end of the shank to the foot keel. The shank has a width in the frontal plane which is greater than the thickness of the shank in the sagittal plane throughout the entire length of the shank (compare Figures).

With regards to statements of intended use and other functional statements (e.g., adapted to be affixed; so as to assist or replace; adapted to extend; adapted to prevent; etc.), they do not impose any structural limitations on the claims distinguishable over the device of **E.C. Carter**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

With regards to the method claims, said claims include features which are not techniques of the claimed methods but represent objectively inherent consequences of the techniques performed, e.g., "the device returning the stored energy during force unloading of the prosthesis

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adding to the propulsion of the person's body in gait" (claim 4) and "releases the stored energy in said later stages of stance-phase of gait to add to the propulsion force of the person's body" (claim 36). **E.C. Carter** discloses the claimed structure of the prosthetic foot, and is inherently capable of, e.g., "returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait". Further, the ankle torque ratio will approximate/mimic the natural physiologic ankle torque ratio (e.g., 11 to 1).

8. Claims 1-10, 12-17, 19, 30-37, and 40-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **GOEMED ORTHOPAEDIE SERVICE** (DE 299 20 434 U1; cited in Applicants' IDS).

Referring to Figure 1, GOEMED discloses a prosthetic foot comprising:

(i) A foot keel (foot spring 3) shaped *to approximate* the shape of the bottom of a foot (see Figure 1), and having forefoot, midfoot, and hindfoot portions;

(ii) A resilient, upstanding, monolithically-formed calf shank (spring 5) having a lower end connected to the foot keel and extending upwardly therefrom to a middle portion of the shank by way of an anterior facing convexly curved surface (outer leaf spring element 11) *to form* an ankle joint area of the prosthetic foot and extending upwardly in a substantially curvilinear manner above the ankle joint area *to form* a lower, prosthetic part of a leg, the shank having an upper end (**first interpretation:** upper free end 8; **second interpretation:** element 4; **third interpretation:** end region/loop 18) *for connection* with a supporting structure on a person's leg stump; and

(iii) A device including a flexible strap (**first interpretation:** lower component 16; **second interpretation:** flexible strap 12) extending between and connected (directly or indirectly) to the



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upper and lower ends of the shank to dampen the motion and limit the extent of the motion of the upper end of the shank in at least one of compression and expansion, and a spring (spring 13 and/or spring 22) which is resiliently biased by the at least one strap in response to anterior movement of the upper end of the calf shank. The means for adjustably tensioning the at least one strap is 20.

The foot and shank comprise a plurality of concavities (inner, opposite surfaces of the spring and/or concavity of the midfoot). An adjustable fastening arrangement (coupling element 25 and/or longitudinally-spaced fasteners 24, 27) connects the lower end of the shank to the foot keel. Spring 5 comprises laminates of a composite material, as well as a friction-reducing coating (e.g., PTFE). The lower end of the spring is downward convexly curved, and terminates in a posterior free end which extends/angles upwardly (e.g., lower FREE end 10). The shank has a width in the frontal plane which is greater than the thickness of the shank in the sagittal plane throughout the entire length of the shank (compare Figure 1 to Figure 2).

With regards to statements of intended use and other functional statements (e.g., adapted to be affixed; so as to assist or replace; adapted to extend; adapted to prevent; etc.), they do not impose any structural limitations on the claims distinguishable over the device of **GOEMED ORTHOPAEDIE SERVICE**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the

apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

With regards to the method claims, said claims include features which are not techniques of the claimed methods but represent objectively inherent consequences of the techniques performed, e.g., "the device returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait" (claim 4), and "releases the stored energy in said later stages of stance-phase of gait to add to the propulsion force of the person's body" (claim 36). **GOEMED ORTHOPAEDIE SERVICE** discloses the claimed structure of the prosthetic foot, and is inherently capable of, e.g., "returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait". Further, the ankle torque ratio will approximate/mimic the natural physiologic ankle torque ratio (e.g., 11 to 1).

**9.** Claims 1-17 and 30-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Martin** (FR 2 734 151; cited in Applicants' IDS).

Referring to Figures 1-3, Martin discloses a prosthetic foot comprising:

- (i) A foot keel (sole part 10) shaped *to approximate* the shape of the bottom of a foot (see Figure 1), and having forefoot, midfoot, and hindfoot portions;
- (ii) A resilient, upstanding, monolithically-formed calf shank (reinforcement 20) having a lower end (22) connected to the foot keel and extending upwardly therefrom to a middle portion of the shank by way of an anterior facing convexly curved surface (anterior surface of reinforcement 20) *to form* an ankle joint area of the prosthetic foot and extending upwardly in a substantially

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curvilinear manner above the ankle joint area *to form* a lower, prosthetic part of a leg, the shank having an upper end (21) *for connection* with a supporting structure on a person's leg stump; and

(iii) A strap (tension cord/strap 30) and a spring (spring 24) extend between and connected (directly or indirectly) to the upper and lower ends of the shank to dampen the motion and limit the extent of the motion (controls anterior movement, and assists posterior movement) of the upper end of the shank. The foot and shank comprise a plurality of concavities (Figure 1: inner, opposite surfaces of the spring and/or concavity of the midfoot), including a concavity (; Figure 2: concavity 40) along a medial dorsal aspect of its mid-foot portion. An adjustable fastening arrangement (24) connects the lower end of the shank to the foot keel. The lower end of the spring is downward convexly curved, and terminates in a posterior free end which extends/angles upwardly (clearly seen in Figure 1). As seen in Figure 3, the midfoot portion of the foot keel has a longitudinal arch with a medial aspect larger in radius and with a relatively higher dynamic response capability than a lateral aspect of the arch. The length of the strap can be adjusted (e.g., at the top end and/or bottom end), depending on the patient's need and/or condition.

With regards to statements of intended use and other functional statements (e.g., adapted to be affixed; so as to assist or replace; adapted to extend; adapted to prevent; etc.), they do not impose any structural limitations on the claims distinguishable over the device of **Martin**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469,

15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

With regards to the method claims, said claims include features which are not techniques of the claimed methods but represent objectively inherent consequences of the techniques performed, e.g., "the device returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait" (claim 4), and "releases the stored energy in said later stages of stance-phase of gait to add to the propulsion force of the person's body" (claim 36). **Martin** discloses the claimed structure of the prosthetic foot, and is inherently capable of, e.g., "returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait". Further, the ankle torque ratio will approximate/mimic the natural physiologic ankle torque ratio (e.g., 11 to 1).

**10.** Claims 1-10, 12, 13, 15-17, 19, 30-32, and 40-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Fikes et al.** (US 4,911,724; cited in Applicants' IDS).

Referring to Figures 1-5, Fikes et al. disclose a prosthetic foot comprising:

- (i)** A foot keel (**first interpretation:** keel 12; **second interpretation:** foot keel 30; **third interpretation:** leaf-spring 34A) shaped to *approximate* the shape of the bottom of a foot (see Figure 1A), and having forefoot, midfoot, and hindfoot portions;
- (ii)** A resilient, upstanding, monolithically-formed calf shank (11/14) having a lower end connected to the foot keel and extending upwardly therefrom to a middle portion of the shank by way of an anterior facing convexly curved surface and extending upwardly in a substantially

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curvilinear manner above the anterior facing convexly curved surface *to form* a lower, prosthetic part of a leg, the shank having an upper end *for connection* with a supporting structure on a person's leg stump; and

(iii) A flexible strap (66) and a spring (68) extending between and connected (directly or indirectly) to the upper and lower ends of the shank to dampen the motion and limit the extent of the motion (controls anterior movement, and assists posterior movement) of the upper end of the shank. The foot and shank comprise a plurality of concavities (inner, opposite surfaces of the spring and/or concavity of the midfoot). An adjustable fastening arrangement (coupling element/nut + fastener 36) connects the lower end of the shank to the foot keel. The shank has a width in the frontal plane which is greater than the thickness of the shank in the sagittal plane throughout the entire length of the shank (compare Figure 1, 2A, and 3). Ankle portion 22' also comprises an anterior facing convexly curved surface (see Figure 2A).

With regards to statements of intended use and other functional statements (e.g., adapted to be affixed; so as to assist or replace; adapted to extend; adapted to prevent; etc.), they do not impose any structural limitations on the claims distinguishable over the device of **Fikes et al.**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). “[A]pparatus claims cover what a device is, not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof

during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

With regards to the method claims, said claims include features which are not techniques of the claimed methods but represent objectively inherent consequences of the techniques performed, e.g., "the device returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait" (claim 4), and "releases the stored energy in said later stages of stance-phase of gait to add to the propulsion force of the person's body" (claim 36). **Fikes et al.** disclose the claimed structure of the prosthetic foot, and is inherently capable of, e.g., "returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait". Further, the ankle torque ratio will approximate/mimic the natural physiologic ankle torque ratio (e.g., 11 to 1).

**11.** Claims 1-19 and 30-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Atkinson et al.** (US PG Pub No 2002/0087216 A1; cited in Applicants' IDS).

Referring to Figures 9-13, 19, and 20, Atkinson et al. disclose a prosthetic foot comprising:

- (i) A foot keel (454) shaped *to approximate* the shape of the bottom of a foot (see Figures 10, 11, 13, and 20), and having forefoot, midfoot, and hindfoot portions;
- (ii) A resilient, upstanding, monolithically-formed calf shank (e.g., spring 410) having a lower end connected to the foot keel and extending upwardly therefrom to a middle portion of the shank by way of an anterior facing convexly curved surface (412) *to form* an ankle joint area of the prosthetic foot and extending upwardly in a substantially curvilinear manner above the ankle joint area *to form* a lower, prosthetic part of a leg, the shank having an upper end (**first**

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**interpretation:** 414; **second interpretation:** 414 + 415; **third interpretation:** 414 + 415 + 452; **fourth interpretation:** 452) *for connection* with a supporting structure on a person's leg stump; and

(iii) A device (e.g., 355, strap 486, 586/588, strap 786; see other embodiments described at paragraphs 0114 and 0115) and a spring (**first interpretation:** any of the two or more straps 486, see paragraph 0094; **second interpretation:** bumper 608, see paragraphs 0106 and 0107) extending between and connected (directly or indirectly) to the upper and lower ends of the shank to dampen the motion and limit the extent of the motion (controls anterior movement, and assists posterior movement) of the upper end of the shank. Strap 486 may comprise a single strap/cord or two or more individual straps/cords (see paragraph 0094). The foot and shank comprise a plurality of concavities (inner, opposite surfaces of the spring and/or concavity of the midfoot). An adjustable fastening arrangement (Figures 11 and 13: coupling element 496 + fastener 488; Figure 20: coupling elements 804, 806 + longitudinally-spaced fasteners 808) connects the lower end of the shank to the foot keel. The lower end of the spring is downward convexly curved, and terminates in a posterior free end which extends/angles upwardly (see Figure 10B). The shank has a width in the frontal plane which is greater than the thickness of the shank in the sagittal plane throughout the entire length of the shank (compare Figures). The shank and at least a portion of the foot keel are monolithically formed (i.e., "cast or formed from a single piece, element, or structure", as disclosed in paragraph 0082). The shank and foot keel are formed of metal or plastic, including thermo-formed materials (see paragraphs 0044 and 0047). The length of the strap and/or initial loading of the spring can be adjusted (e.g., at the top end and/or bottom end), depending on the patient's need and/or condition (also see Figures 14-

17, characters 606 and/or 612/614; read paragraphs 0106 and 0109-0112). The midfoot portion of the foot keel has a longitudinal arch with a medial aspect larger in radius and with a relatively higher dynamic response capability than a lateral aspect of the arch (see paragraph 0099, among others), depending on the intended purpose (i.e., patient dependent).

Also, Figures 5A-6C clearly show a resilient calf shank (32/53), a flexible strap (36), and a spring (35) adjacent and associated with the flexible strap.

With regards to statements of intended use and other functional statements (e.g., adapted to be affixed; so as to assist or replace; adapted to extend; adapted to prevent; etc.), they do not impose any structural limitations on the claims distinguishable over the device of **Atkinson et al.**, which is capable of being used as claimed if one so desires to do so. *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969).

With regards to the method claims, said claims include features which are not techniques of the claimed methods but represent objectively inherent consequences of the techniques performed, e.g., "the device returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait" (claim 4), and "releases the stored energy in said later stages of stance-phase of gait to add to the propulsion force of the person's body"



(claim 36). **Atkinson et al.** disclose the claimed structure of the prosthetic foot, and is inherently capable of, e.g., “returning the stored energy during force unloading of the prosthesis adding to the propulsion of the person's body in gait”. Further, the ankle torque ratio will approximate/mimic the natural physiologic ankle torque ratio (e.g., 11 to 1).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javier G. Blanco whose telephone number is 571-272-4747. The examiner can normally be reached on M-F (9:00 a.m.-7:00 p.m.), first Friday of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, David Isabella can be reached on **(571)272-4749**. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Javier G. Blanco/

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Examiner, Art Unit 3774

/Dave Willse/

Primary Examiner, Art Unit 3738